

CLAIMS

What is Claimed Is:

1. A method for strong access control to a network, the method comprising the following steps:

- (a) coupling an authentication device to a network;
- (b) transmitting a first response;
- 5 (c) generating a second response upon receipt of the first response;
- (d) comparing the first response and second response;
- (e) authenticating the authentication device if the first response and second response match, and not authenticating the authentication device if the first response and second response do not match; and
- 10 (f) providing access to network resources upon authentication of the authentication device.

2. The method of Claim 1 wherein limited access is provided to network resources upon authentication of the authentication device.

3. The method of Claim 1 wherein an access level is assigned to the authentication device.

4. The method of Claim 1 further comprising:

- (g) determining whether the authentication device is coupled to the network, if the authentication device is not coupled to the network then repeating steps (a) through (f) and if the device is coupled to the network then providing access to network resources of the network upon
- 5 authentication of the authentication device

5. A method for strong access control to a network, the method comprising the following steps:

- (a) coupling an authentication device to a network;
- (b) transmitting an initial response;
- 5 (c) generating a network response upon receipt of the initial response;
- (d) comparing the initial response and the network response;
- (e) authenticating the authentication device if the initial response and network response match, and not authenticating the authentication device if the initial response and network response do not match;
- 10 (f) providing access to network resources upon authentication of the authentication device;
- (g) transmitting a subsequent response for accessing subsequent network resources;
- (h) comparing the subsequent response to a subsequent network response;
- (i) authenticating the authentication device if the subsequent response and
15 subsequent network response match, and not authenticating the authentication device if the subsequent response and subsequent network do not match; and
- (j) providing access to subsequent network resources upon authentication of the authentication device.

6. The method of Claim 5 wherein access to network resources is determined by an access level assigned to the authentication device.

7. The method of Claim 5 further comprising:

- (k) determining whether the authentication device is coupled to the network, if the authentication device is not coupled to the network then repeating steps (a) through (f) and if the device is coupled to the network then providing access to network resources upon authentication
5 of the authentication device.

8. The Claim 5 further comprising:

- (l) repeating steps (g) through (j) for each subsequent response for accessing subsequent network resources.

9. A method for strong access control to a network, the method comprising the following steps:

- (a) coupling an authentication device to a network;
- (b) generating an access request for accessing network resources;
- 5 (c) generating a challenge upon receipt of the access request;
- (d) generating an initial response upon receipt of the challenge;
- (e) generating an initial network response upon receipt of the initial response;
- (f) comparing the initial response and initial network response;
- (g) authenticating the authentication device if the initial response and initial network
10 response match, and not authenticating the authentication device if the initial
response and initial network response do not match;
- (h) providing limited access to network resources to the authentication device upon
authentication of the authentication device;
- (i) transmitting a subsequent access request for accessing subsequent network
15 resources;
- (j) generating a subsequent network response upon receipt of the subsequent access
request;
- (k) comparing the subsequent access request and subsequent network response;
- (l) authenticating the authentication device if the subsequent access request and
20 subsequent network response match, and not authenticating the authentication
device if the subsequent access request and subsequent network response do not
match; and
- (m) providing limited access to subsequent network resources upon authentication of
the authentication device.

10. The method of Claim 9 wherein access to network resources is determined by an access level assigned to the authentication device.

11. The method of Claim 9 further comprising:

(k) determining whether the authentication device is coupled to the network, if the authentication device is not coupled to the network then repeating steps (a) through (g) and if the device is coupled to the network then providing access to network resources upon authentication of the authentication device.

12. The Claim 9 further comprising:

(l) repeating steps (j) through (m) for each subsequent response for accessing subsequent network resources.

13. The method of Claim 9 wherein the initial response and initial network response comprise an answer.

14. The method of Claim 13 wherein the subsequent access request comprises the answer.

15. The method of Claim 13 wherein the subsequent network response comprises the answer.

16. The method of Claim 13 wherein each subsequent access request and each subsequent network response comprises the answer.